DOCKET FILE COPY ORIGINAL

EDERAL A SAMERICATION COMMISSION // / Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of Amendments of Parts 1, 21 and MM Docket No. 97-217) 74 to Enable Multipoint Distribution Service and File No. RM-9060 Instructional Television Fixed Service Licensees to Engage in) Fixed Two-Way Transmissions

To: The Commission

REPLY COMMENTS OF GULF COAST MDS SERVICE COMPANY

Gulf Coast MDS Service Company ("Gulf Coast"), by its attorneys, respectfully submits the following reply comments concerning the Commission's Notice of Proposed Rulemaking ("NPRM"), released on October 10, 1997, in the captioned proceeding.

Introduction. On May 21, 1996, Gulf Coast filed a petition for rulemaking to amend Parts 21 and 74 of the Commission's rules with respect to licensing in the Multipoint Distribution Service ("MDS") and the Instructional Television Fixed Service ("ITFS") for the Gulf of Mexico. Gulf Coast's petition is still pending with the Commission. Given Gulf Coast's petition, as well as its efforts in developing a wireless system in the Gulf operating on MDS/ITFS frequencies, it has an interest in the potential impact that the captioned proceeding may have on Gulfbased operations. Gulf Coast generally supports comments filed in the above captioned proceeding that are in favor of flexibility for

No to ignoring recid. Of

Gulf Coast holds a developmental authorization for that purpose.

MDS operations. Gulf Coast's specific positions are set forth below.

- 2. <u>Issues Regarding Permissible Use</u>. In an ex parte presentation, Catholic Television Network ("CTN") argued that the Commission should only permit upstream transmissions on MDS/ITFS frequencies on a secondary basis to protect ITFS facilities that may be built in the future. Gulf Coast opposes CTN's proposal on two grounds. First, CTN's proposal is at odds with the Commission's goal of promoting competition in the wireless telecommunications industry. Second, and equally as important, MDS licensees may not be able to attract the necessary buildout capital if upstream transmissions are permitted only on a secondary basis.
- 3. The parties that filed the petition for rulemaking that commenced this proceeding (collectively, the "Petitioners") propose that the Commission permit licensees to alternate between the provision of common carrier and non-common carrier services on the same channel without prior notice or Commission approval. Gulf Coast supports this proposal. Given the availability of digital technology and the emphasis on efficient use of spectrum, the historical requirement that common carrier and non-common carrier traffic be separated is no longer valid. Accordingly, any licensee that is authorized to carry common carrier traffic over MDS

See Letter from William D. Wallace, counsel to CTN, to William F. Caton, MM Docket No. 97-217, at Attachment IV.D.2.

Petitioners Comments at 119.

channels should be permitted to carry non-common carrier traffic over the same channels. This change will permit licensees to make efficient use of available channels depending on the demand at any given time.

- 4. Technical Rules. Petitioners propose that response stations deployed under the blanket wide-area license should be permitted to operate at a maximum power level of 2 watts of transmitter output and 33 dBw effective isotropic radiated power ("EIRP"). Since the most meaningful power limitation rule is one stated in terms of EIRP, Gulf Coast supports the 33 dBw EIRP limit to provide additional engineering flexibility.
- 5. Petitioners also propose modifying the spectral mask specification.⁵ The Commission's current rule specifies maximum attenuation based upon 6 MHz and 125 kHz channels. Since the NPRM proposes subchannelization and superchannelization, the Petitioners propose that the spectral mask rule not specify any particular bandwidth. Instead, the rule should specify the signal levels to be demonstrated and the ways that they relate mathematically.⁶ Gulf Coast supports Petitioners' proposal so that licensees can efficiently subchannelize and superchannelize their systems.

⁴ Petitioners Comments at 56.

⁵ Petitioners Comments at 127-32.

⁶ Id. at 128.

- 6. CTN advocates that the out-of-band emission limits for response station transmitters should be at least -48 dBc for signals within ±6 MHz of the response station band edge and at least -60 dBc for signals greater than ±6 MHz of the response station band edge. Moreover, if the FCC permits response station EIRPs of greater than +48 dBm (but in no event greater than +63 dBm), then a more stringent out-of-band specification should be adopted, dB for dB. Gulf Coast opposes CTN's recommendation because it unnecessarily restricts engineering flexibility and increases equipment costs.
- 7. NextLevel Systems, Inc. ("NextLevel") also makes a proposal regarding emission mask specifications. Gulf Coast supports NextLevel's proposal. Incorporating Next Level's proposed maximum attenuation level will conform the MDS/ITFS rules with the rules of other radio services, including PCS.
- 8. Spike Technologies, Inc. ("Spike") proposes changing the definition of "response station hub," so that a response station hub can relay and redirect "upstream" transmissions, not merely collect them from response stations. Gulf Coast supports Spike's

⁷ CTN Comments at 15.

^{8 &}lt;u>Id</u>.

⁹ NextLevel Comments at 3-7.

¹⁰ Spike Comments at 2-3.

proposal as providing necessary flexibility for the design and operation of MDS systems.

- 9. Interference Criteria. EDX, an MDS/ITFS software developer, proposed rules to simplify the interference analysis process, based upon the broadband Personal Communications Services ("PCS") model. The interference criteria proposed by EDX is based, in part, on representing in the model that all response stations in a service area are located at the same point. Petitioners contend that EDX's proposal is flawed because it understates the interference problem at the border between markets. Further, EDX's proposal does not account for the use of non-circular cells or different grades of antenna within a service area. Gulf Coast agrees with Petitioner's analysis of the EDX proposal and recommends that the Commission decline to adopt EDX's proposal.
- 10. Petitioners propose that, when appropriate, the rules should permit the use of most interference mitigation techniques, including terrain shielding. Gulf Coast supports the use of these techniques. However, Gulf Coast suggests that allowing noise floor factors to influence interference calculations will complicate the process of determining interference and should not be permitted.

¹¹ EDX Comments at 8-9.

¹² Petitioners comments at 60.

Petitioners Comments at 62-104.

- 11. In their comments, Petitioners observe that only one response station in a sector can use a particular frequency at any given time. Therefore, they propose that the rules should not require the accumulation of signals of multiple response stations within the sector as if they would operate simultaneously on the same frequency. Gulf Coast supports this proposal.
- 12. Petitioners also identify several ways that a response station hub licensee can manage interference. Therefore, they propose that a response station hub can be adequately protected by limiting the power flux density of the interfering signal received at each reception antenna previously installed or proposed for the hub to no greater than -190 dBW/m²/Hz, if the interfering signal is co-channel, or -151 dBW/m²/Hz, if the interfering signal is an adjacent channel with a 20 dB adjustment if the interfering signal is cross polarized.¹5 Since Petitioner's proposal provides adequate protection to response station hubs, Gulf Coast supports the adoption of this proposal.
- 13. Petitioners propose permitting licensees to use QPSK and CDMA on the same terms and subject to the same conditions applicable to VSB and QAM to permit licensees to make use of new technology. Gulf Coast supports this proposal and further

¹⁴ <u>Id</u>. at 65.

¹⁵ <u>Id</u>. at 67.

¹⁶ Id. at 116.

proposes the final rules specifically provide that offset QPSK ("OPQSK") is also permitted. Further, Gulf Coast suggests that the final rules must be flexible enough to permit any modulation technique that enhances the capability of the system and optimizes use of the spectrum.

14. Conclusion. Gulf Coast generally supports the Commission's proposal to permit MDS and ITFS licensees to engage in two-way transmissions. Gulf Coast suggests that the rules that support two-way transmissions must be sufficiently flexible to permit the use of new techniques and equipment as they become available. Further, as long as incumbent and adjacent market licensees are adequately protected against interference, MDS and ITFS licensees should be provided the latitude under the rules to design their systems to make efficient use of their allotted spectrum.

Respectfully submitted,
GULF COAST MDS SERVICE COMPANY

Bv:

Richard S. Myers Jay N. Lazrus

Its Attorneys

Myers Keller Communications Law Group 1522 K Street, N.W., Suite 1100 Washington, D.C. 20005 (202) 371-0789

CERTIFICATE OF SERVICE

I, Katrina Blackwell, an employee in Myers Keller Communications Law Group, do hereby certify that on this 9th day of February, 1998, a copy of the foregoing "REPLY COMMENTS OF GULF COAST MDS SERVICE COMPANY" was delivered via first class mail to:

Barbara Kreisman, Chief Video Services Division Mass Media Bureau 1919 M Street, N.W. Room 702 Washington, DC 20554

Dave Roberts
Video Services Division
Mass Media Bureau
1919 M Street, N.W.
Room 702
Washington, DC 20554

Donald J. Evans
William M. Barnard
Evans & Sill, P.C.
1627 Eye Street, N.W.
Suite 700
Washington, DC 20006
Counsel for Alliance of MDS
Licensees

Paul J. Sinderbrand
William W. Huber
Wilkinson, Barker, Knauer &
Quinn, L.L.P.
2300 N Street, N.W.
Suite 700
Washington, DC 20037-1128
Counsel for Petitioners

T. Lauriston Hardin, P.E. George W. Harter, III Hardin & Associates, Inc. 1300 Diamond Springs Road Suite 600 Virginia Beach, VA 23455 Technical Consultants to the Petitioners S. Merrill Weiss
Merrill Weiss Group
908 Oak Tree Avenue, Suite A
South Plainfield, NJ 07080
Technical Consultants to the
Petitioners

John B. Schwartz, President Instructional Telecommunications Foundation, Inc. P.O. Box 6060 Boulder, CO 80306

Harry R. Anderson President and CEO EDX Engineering, Inc. P.O. Box 1547 Eugene, OR 97440-1547

Edwin N. Lavergne J. Thomas Nolan Ginsburg, Feldman & Bress, Chartered 1250 Connecticut Avenue, N.W. Washington, DC 20036-2603 Counsel for Catholic Television Network

William D. Wallace Crowell & Moring, L.L.P. 1001 Pennsylvania Avenue, N.W. Washington, DC 20004 Counsel for Catholic Television Network James E. Meyers
Law Office of James E. Meyers,
P.C.
1633 Connecticut Avenue, N.W.
Suite 400
Washington, DC 20009-1041
Counsel for Dallas County
Community College District et al.

Gary Vujnovich
Abacus Communications Company
1801 Columbia Road, N.W.
Suite 101
Washington, DC 20009-2001
Counsel for Hispanic
Information and
Telecommunications Network

Rudolph J. Geist
Wilkes, Artis, Hedrick & Lane,
Chartered
1666 K Street, N.W.
Suite 1100
Washington, DC 20006
Counsel for Hispanic
Information and
Telecommunications Network

Kathleen A. Cox
Acting General Counsel
Robert M. Winteringham
Corporation for Public
Broadcasting
901 E Street, N.W.
Washington, DC 20004-2037

Marilyn Mohrman-Gillis Lonna Thompson Association of America's Public Television Stations 1350 Connecticut Avenue, N.W. Washington, DC 20036

Gregory Ferenbach
Patricia DiRuggiero
Public Broadcasting Service
1320 Braddock Place
Alexandria, VA 22314

Robert J. Ungar
Arter & Hadden, L.L.P.
1801 K Street, N.W.
Suite 400K
Washington, DC 20006
Counsel for Public Television
19, Inc.

L. Marie Guillory
Paul M. Johnson
National Telephone Cooperative
Association
2626 Pennsylvania Avenue, N.W.
Washington, DC 20037

Robert J. Rini
Sarah H. Efird
Rini, Coran & Lancellota, P.C.
1350 Connecticut Avenue, N.W.
Washington, DC 20036
Counsel for San Francisco-San
Jose Educator/Operator
Consortium

Todd D. Gray
Margaret L. Miller
Dow, Lohnes & Albertson,
P.L.L.C.
1200 New Hampshire Avenue,
N.W., Suite 800
Washington, DC 20036-6802

Steven A. Lancellotta
E. Lawrence Zolt
Rini, Coran & Lancellota, P.C.
1350 Connecticut Avenue, N.W.
Suite 900
Washington, DC 20036
Counsel for Spike
Technologies, Inc.

Robert A. Woods
Steven C. Schaffer
Malcolm G. Stevenson
Schwartz, Woods & Miller
1350 Connecticut Avenue, N.W.
Suite 300
Washington, DC 20036
Counsel for numerous ITFS
entities

Glenn B. Manishin
Blumenfeld & Cohen
1615 M Street, N.W.
Suite 700
Washington, DC 20036
Counsel for Webcel
Communications, Inc.

Martin L. Stern
David Rice
Preston, Gates, Ellis &
Rouvelas Meeds L.L.P.
1735 New York Avenue, N.W.
Suite 500
Washington, DC 20006
Counsel for Webcel
Communications, Inc.

William B. Barfield
Jim O. Llewellyn
BellSouth Corporation
1155 Peachtree Street, N.E.
Suite 1800
Atlanta, GA 30309

Thompson T. Rawls, II
Gali L. Hagel
BellSouth Wireless Cable, Inc.
1100 Abernathy Road
500 Northpark Center
Suite 414
Atlanta, GA 30328

Paul J. Feldman
Fletcher, Heald & Hildreth,
P.L.C.
1300 North 17th Street
11th Floor
Rosslyn, VA 22209-3801
Counsel for University of
Maryland System

Quincy Rodgers
Christine G. Crafton
Faye R. Morrison
NextLevel Systems, Inc.
Two Lafayette Centre
1133 21st Street, N.W.
Suite 405
Washington, DC 20036

Robyn G. Nietert
Rhonda L. Neil
Brown, Nietert & Kaufman,
Chartered
1920 N Street, N.W.
Suite 660
Washington, DC 20036
Counsel for Wireless One of
North Carolina, L.L.C.

Wayne Coy, Jr.
Cohn & Marks
1920 N Street, N.W.
Suite 300
Washington, DC 20036-1622
Counsel for National ITFS
Association

ITS, Inc. 1231 20th Street, N.W. Washington, DC 20036

Katrina Blackwell